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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/510,920	02/11/2005	Bernard Boulay	121438	4897

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P.O. BOX 19928
ALEXANDRIA, VA 22320

EXAMINER

CHAN, SING P

ART UNIT	PAPER NUMBER
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1734

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/510,920

Applicant(s)

BOULAY, BERNARD

Examiner

Sing P. Chan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/19/2005</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 2, 3, 5, and 14-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Claim 2 recites the limitation "the two-dimensional type" in line 2. There is insufficient antecedent basis for this limitation in the claim.

*claim 2
"the carrier"
"the wires"
NA*

4. Regarding claim 3, it is unclear what is intended to include with the recitation of "of the silicone-coated paper kind." For the purpose of examination, "silicone-coated paper" will be assumed.

5. Claim 3 recites the limitation "the silicone-coated paper" in line 3. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 5 recites the limitation "the three-dimensional type" in line 2. There is insufficient antecedent basis for this limitation in the claim.

7. Claims 14-19 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: means for delamating the protective sheet from the carrier sheet.

8. Claim 14 recites the limitation "the code" in line 11. There is insufficient antecedent basis for this limitation in the claim.

9. Regarding claim 18, the limitation of "in its downstream part" is unclear as to where the location of the means for checking the presence and correct positioning of the laid wires.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1, 5, and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Gambino et al (U.S. 5,831,532).

Regarding claims 1, 5, and 10, Gambino et al discloses an identification tag with amorphous wire, i.e. soft wire. The tag includes wires placed next to one another in a closely spaced parallel array of at least 2 millimeters embedded in a substrate such as paper or thin plastic with an adhesive (Col 6, lines 49-67) with the presence or absence of the wire to establish an unambiguous binary code (Col 8, lines 4-37). The wires are amorphous magnetic wires, which are soft ferromagnetic wire (Col 3, lines 45-49).

Regarding claims 9, Gambino et al discloses several bits at one or both ends of the multibit array can be utilized as reference markers, i.e. start of the reading zone. (Col 8, lines 4-11)

Regarding claim 11, Gambino et al discloses a missing wire or a non-magnetic wire is used for the "O" or "decoy" in the code. (Col 8, lines 36-37)

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12. Claims 2, 3, and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamanaka (JP 10-249963).

Regarding claims 2 and 3, Yamanaka discloses a magnetic label with two magnetic wires are added to an opening between a label material and an exfoliation sheet or silicone release liner (See Machine English translation of JP 10-249963, Paragraph 17) and adhesive on the label material (See Machine English translation of JP 10-249963, Paragraph 5).

Regarding claim 12, Yamanaka discloses a method for applying wires to the label material. The apparatus includes a roll for the label material with a label material, a binder, and a release sheet (See Machine English translation of JP 10-249963, Paragraph 14), unwind the label material from the roll (See Machine English translation of JP 10-249963, Paragraph 15), pulling the release sheet away with a bar (23) and inserting a wire or two wires between the label material, which would correspond to an adopted code and the release sheet onto the binder and relaminate the release sheet onto the label material with pressure rollers (24) (See Machine English translation of JP 10-249963, Paragraph 17).

Regarding claim 13, Yamanaka discloses printing the label material (See Machine English translation of JP 10-249963, Paragraph 16) and cutting the label material to form labels. (See Machine English translation of JP 10-249963, Paragraph 19)

Regarding claim 14, Yamanaka discloses an apparatus for applying wires to the label material. The apparatus includes a roll for the label material with a label material,

a binder, and a release sheet (See Machine English translation of JP 10-249963, Paragraph 14), unwind the label material from the roll (See Machine English translation of JP 10-249963, Paragraph 15), pulling the release sheet away with a bar (23) and inserting a wire or two wires between the label material, which would correspond to an adopted code and the release sheet onto the binder and relaminate the release sheet onto the label material with pressure rollers (24) (See Machine English translation of JP 10-249963, Paragraph 17).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gambino et al (U.S. 5,831,532) as applied to claim 1 above, and further in view of Chiriak et al (U.S. 6,270,591).

Gambino et al as disclosed above is silent as to the amorphous wire is glass coated. However, providing amorphous wire with a glass coating is well known and conventional as shown for example by Chiriak et al. Chiriak et al discloses the amorphous wire is formed with a quantity of Fe, Co, Ni, B, Si, C, P, Cr, Ta, Nb, V, Cu, Al, Mo, Mn, W, Zr, and Hf alloy (Col 2, lines 14-20) and coated with a glass tube (Col 4,

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lines 47-67) with the metallic core ranged from 1 μm to 50 μm in diameter and the glass cover thickness range from 0.5 μm to 20 μm (Col 2, lines 4-12).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an amorphous wire with a glass coating for coding as disclosed by Chiriac et al in the tag of Gambino et al to provide a magnetic wire with suitable magnetic properties of the metallic core together with corrosion resistance, and electrical insulation offered by the glass cover. (See Chiriac et al, Col 4, lines 26-30)

15. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yamanaka (JP 10-249963) as applied to claim 2 above, and further in view of Lambert et al (U.S. 4,271,223).

Yamanaka as disclosed above is silent as to the label material is transparent. However, providing transparent label material is well known and conventional as shown for example by Lambert et al. Lambert et al discloses a label material formed of plastic film, which is transparent and bonded to the silicone coated release paper with pressure sensitive adhesive. (Col 4, lines 37-68)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a transparent label material or plastic film as disclosed by Lambert et al in the label of Yamanaka to provide label stoke which ordinary printing inks adhere strongly without any surface treatment and highly resistant to abrasion. (See Lambert et al, Col 1, lines 33-37)

16. Claims 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamanaka (JP 10-249963) as applied to claim 14 above, and further in view of Suzuki (U.S. 5,913,469) and Kovaleski (U.S. 4,298,174).

Yamanaka as disclosed above is silent as to the coils of wires are supported on a vertically mobile carrier, a means for initial fastening and pulling the ends of the wires and a device for transverse positioning of the wires. However, providing a means for initial fastening and pulling the ends of the wires and a device for transverse positioning of the wires is well known and conventional as show for example by Suzuki. Suzuki discloses a wire feeding apparatus. The apparatus includes a wire shifting jig movable upward, downward, right and left with shifting pins, which form a comb and supported on an air cylinder or a piston or a ram (Col 5, lines 31-49), and a length adjusting drawing chuck for clamp and drawing the wires to a predetermined length moved with a screw shaft by rotating a required number of times by a motor (Col 5, line 65 to Col 6, line 13), wherein the screw shaft is a functional equivalent to a ram to move the device in the longitudinal direction.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a means for pulling and fastening the end of the wires and a device for transverse positioning of the wires as disclosed by Suzuki in the apparatus of Yamanaka to provide a wire feed mechanism capable of feeding wires with high precision. (See Suzuki, Col 2, lines 14-17) Yamanaka as modified by Suzuki is silent as to the coils of wires is supported on a vertically mobile carrier. However, providing a vertically mobile carrier for the coils of wires is well known and conventional

as shown for example by Kovaleski. Kovaleski discloses an apparatus for wire take-off. The apparatus includes providing wires in spools on vertically movable sliders or swivel carriers to allow positioning of the spools such that their axes lie in a single plane and diverge toward the guide area. (Col 5, line 54 to Col 6, line 14)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide spools vertically movable sliders as disclosed by Kovaleski in the apparatus of Yamanaka as modified by Suzuki to allow the wires to be pay-out continuously from a first spool until the first spool is depleted with pay-out from the second spool commencing automatically thereafter without halting the movement of the strand or shutting down the equipment. (See Kovaleski, Col 5, lines 60-67)

17. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamanaka (JP 10-249963) in view of Suzuki (U.S. 5,913,469) and Kovaleski (U.S. 4,298,174) as applied to claim 15 above, and further in view of Gutierrez (U.S. 5,020,581).

Regarding claim 18, Yamanaka as modified above is silent as to the apparatus includes means for checking the presence and the correct positioning of the laid wires. However, providing means or sensors to check the presence and the correct positioning of the laid wires is well known and conventional as shown for example by Gutierrez. Gutierrez discloses an apparatus for inserting rigid segments in security paper. The apparatus includes sensors to accurately measure the position of the screen roll R and band segments or rigid segment with uniquely coded (Col 1, lines 20-25) to allow the rigid segment be placed appropriate locations (Col 2, lines 54-68)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide sensors to accurately measure the position of the band segment or rigid segment with unique code as disclosed by Gutierrez in the apparatus of Yamanaka as modified by combination of references to precisely insert the ferromagnetic segments into paper web and is inexpensive to implement. (See Gutierrez, Col 1, lines 39-52)

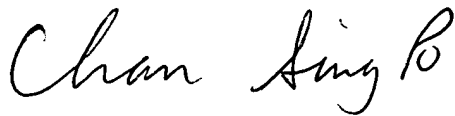
Regarding claim 19, Yamanaka as modified above is silent as to the apparatus includes at least one additional module for laying a wire. However, providing at least one additional module for laying a wire is well known and conventional as shown for example by Suzuki. Suzuki discloses an apparatus for laying wires. The apparatus includes a wire drawing device with a vertically movable grip claw for gripping a desired one of the wires and drawing a wire from a grip (Col 5, lines 49-59), which is capable of being configured to response to detect if more wire is needed (Col 6, lines 43-65).

It would have been obvious to one of ordinary skill in the art at time the invention was made to provide at least one additional drawing device as disclosed by Suzuki in the apparatus of Yamanaka as modified by combination of references to provide a wire feed mechanism capable of feeding wires with high precision. (See Suzuki, Col 2, lines 14-17)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sing P. Chan whose telephone number is 571-272-1225. The examiner can normally be reached on Monday-Thursday 7:30AM-11:00AM and 12:00PM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher A. Fiorilla can be reached on 571-272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



SPC



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